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09/117,219 01/13/99 PALM

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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/117,219

Applicant(s)

Palm et al.

Examiner
WESNER SAJOUS

Art Unit
2672



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1035 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-22 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892)

18) Interview Summary (PTO-413) Paper No(s). _____

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) Notice of Informal Patent Application (PTO-152)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

20) Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

I. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

(A) Claims 13-16, and 19 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 13, 16, 19 recite the limitation “storing x,y,z coordinates of vertices together with the u,v coordinates”, in lines 3-4. By this limitation, it is not understood how the x,y,z and u,v coordinates are stored together, and what purpose does it serve in the embodiment of the invention. There is nowhere in the specification that such feature is described or explained in a manner which would enable the ordinary skilled in the art how to make and use the invention without undue experiment. Clarification's required.

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(B) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- (I) Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- (ii) Claim 2 recites the limitation "positioning of the neutral plane" in line 3. There is insufficient antecedent basis for this limitation in the claim.

II. ***Claim Rejections - 35 USC § 101***

- (a) 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- (b) Claims 13-16, 19, and 22 are rejected under 35 U.S.C. 101 because there is no affirmative recitation in these claims that the data so processed is displayed on a display of a computer.

Applicant, in these claims has recited steps that do nothing more than manipulate basic mathematical constructs, hence these claims are unpatentable. See *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir 1994).

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a. Patentable subject matter is held to exclude "laws of nature, natural phenomena, and abstract ideas". *Diamond v. Diehr*, 450 U.S. 175, 185, 101 S.Ct 1048, 1056 (1981). Only an Applicant's claims are entitled to the protection of the patent system, therefore claims, if expressing ideas in a mathematical form, must describe something beyond the manipulation of ideas in order to qualify as patentable subject matter. *In re Warmerdam*, at 1360. Given the absence of any practical effect or significant independent physical acts, Applicant's claim fails to adequately define the claimed invention within the domain of patentable subject matter.

Correction is required.

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, 17-18, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palm, patent no. 5,748,199.

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Considering claims 1, 2, 4, 7, Palm sets forth the following claimed subject matters of the invention:

- a) the claimed "processor" is met by fig. 62 (CPU);
- b) the claimed "memory" is met by fig. 62 (video RAM); and
- c) the claimed "stereo viewer loaded in memory... including graphical user interface including a video window.... wireframe" is met by fig. 62 (image 2, and display). See also fig. 5.

Palm lacks explicit recitation for the claimed wireframes can be viewed with and without texture, and a plurality of controls for manipulating a wireframe... view of a wireframe, with the plurality of controls includes one or more controls for controlling positioning of the neutral plane of a stereo image.

Palm, however, at col. 14, lines 5-9, depicts that two views of the wireframe portion of the composite image *can be rendered with surface textures* taken from bit maps which can be photorealistic. It is to be understood that the original view of the wireframe is without texture, but
ws can be rendered ~~to~~^{be} viewed with texture (s). The utilization of the wireframe is for replacing parts of the original two dimensional frame of the image with wireframe containing depth information.

Further, at col. 38, lines 11-21, Palm provides that zoom lenses of a pair of cameras are adjusted simultaneously zoom in on an object..., the disparity shift should be adjusted so that the target image remains in the neutral plane. It is accomplished by linking control of servo 345 which controls camera separation with servo 440 of fig. 4 which controls zooming. Thus, by changing focal distance, it is desirable to change the disparity to maintain the target in the neutral

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plane. By the above disclosure, the ordinary skilled in the art would readily understand that the cameras used in Palm contains several controllers which allow the operator to control the position of the image being viewed, including the image wireframe, and to control how the stereo image is viewed, whether it is viewed with or without texture or a view of a wireframe for controlling video animation.

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to consider modifying the features of Palm as such, wherein image's wireframes can be viewed with and without texture, and a plurality of controls for manipulating a wireframe... view of a wireframe, with the plurality of controls includes one or more controls for controlling positioning of the neutral plane of a stereo image. Such modification would be expedient to the ordinary skilled in the art for the purpose of controlling position of images to be in front or behind the neutral plane when creating and displaying images as part of three dimensional animations.

In claim 3, the claimed "controls for adjusting camera offset between points acting as cameras for providing left and right image views of a wireframe" is obviously met by col. 29, lines 25-60 and/or col. 50, lines 5-15. See figs. 21 (a-b) and fig. 22.

Re claim 5, the claimed "one or more controls for selecting display of a wire frame either unrendered or rendered with one of a bit mapped texture...." is obviously met by col. 52, lines 1-11.

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As per claim 9, the claimed "controls includes at least one control for selecting between a stereo view and a nonstereo view of a wireframe" would have been obvious over Palm's disclosure, since the system is user operated and such determination could have been made according to the user's preference.

Re claim 10, the claimed "controls includes one or more controls for magnifying or reducing the size of the wireframe" would have been obvious over Palm's disclosure, because the system's controllers include zoom lenses which could be used to reduce or magnifying the size of a wireframe. See col. 38, lines 11-21.

Regarding claims 11 and 12, Palm sets forth or renders obvious most claimed features of the invention as applied in the rejection of claim 1, but fails to expressly suggest that the computer system comprising a server connected to a network containing files of images.

Nonetheless, Palm, at col. 27, lines 10-35, describes that the image are transmitted over a point to point communication link represented by network 880 to the viewer's location... The user might dial up the video information provider over the network and request 3-D service. By this embodiment, the ordinary skilled in the art would readily recognize that the system is provided a computer network which could be interconnected with a server, as is well known in the art, to download files images to be represented in 3-D stereoscopic type of images. Such computer system could have also included a window interface including a browser application, as a helper for presenting stereo images, for allowing the user to retrieve the files images from the network.

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Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Palm as such, in order to allow the user to switch between two and three dimensional information whenever they are available for display.

As per claim 17, (a) the claimed “extracting wireframe vertex information and compressed bit map from said file” is equivalent to the function of fig. 11, item 56, since the STREAM video information are encoded and compressed under MPEG-2 format, and the video information could be pertaining to vertex information of wireframe stereo video;

b) the claimed “decompressing said compressed bit map” is equivalent to the function performed by device 220 of fig. 12, since the stream demultiplexer is to decompress the compressed bit map file image; and

c) the claimed “displaying a wireframe specified by said wireframe information, with texture taken from said bitmap” is equivalent to the function performed by device 540 of fig. 5.

The invention of claim 17, although is not clearly expressed by the disclosure of Palm, but the Palm disclosure is capable of performing a similar concept without undue experiment of the claimed invention.

The invention of claim 18 recites features equivalent to the invention of claim 17, and are rejected by the same reasons and rationale as claim 17, since the wireframe stereo viewer provided by Palm is pertaining to 3-D video animation.

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The inventions of claims 20 and 21, although slightly different, recite features equivalent to the inventions of claims 17, and 18, respectively, and are, therefore, subject to rejections for the same reasons and rationale sets forth for claims 17-18.

Conclusion

IV. The prior art made of record and not relied upon and considered pertinent to applicant's disclosure are prior art similar to and are equivalent to those recited in the information disclosure statement and PTO 892 form.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-9051, (for formal communications intended for entry)

Or:

(703) 308-5359 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesner Sajous whose telephone number is (703) 308- 5857. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (703) 305-4713. The fax phone number for this group is (703) 308-6606.

Wesner Sajous WOS
Patent Examiner, art unit 2672

June 16, 2001

Matthew Luu

MATTHEW LUU
PRIMARY EXAMINER